

Description

OBJECT OF THE INVENTION

[0001] The present invention has as its object a foldable cradle. 5

BACKGROUND OF THE INVENTION

[0002] Several models of foldable cradles are known and include among them a model being apt to be folded in a highly packed arrangement thus occupying a very reduced space and hence being apt to be advantageously used as a travel cradle since it can be transported in the boot of a motorcar, for example. 10

[0003] This type of foldable cradles comprise an articulated metal framework being formed by an upper frame, four legs and a base structure, the four sides and the bottom being made of a flexible material such as a fabric, for example, a separate, rigid, also foldable plate being comprised on the bottom. 15 20

SUMMARY OF THE INVENTION

[0004] This invention has as its object a foldable cradle of said so-called "travel" type, said cradle being improved by providing it with a shrouding being apt to reinforce it and to at the same time finish it off with a better appearance resembling that of the conventional, non-foldable cradles, the cradle being besides provided with rolling means making it easier to move it when in use, said rolling means being out of action when the cradle is in a stationary condition, i.e. in stationary use. 25

[0005] A characterising feature of this cradle lies in the fact that a shrouding is fitted to each of the four legs of the cradle, said shrouding being for each of said legs formed by a respective upright, rigid piece having an angular cross-section, a shrouding being upperly fitted between said upright, rigid pieces and being thereby applied on the four upper frame side members, this latter shrouding being for each of said side members made up by a respective semiflexible length having a generally prismatic cross-section. 30 35

[0006] An also characterising feature regarding the upright shrouding pieces lies in their inferiorly and securely having a cap fitted to each of them, at least two of said caps having a respective wheel fitted to each of them, said wheel in its assembled state in particular not projecting from the cap base, this latter having an arcuately bevelled portion allowing the wheel to come into contact with the floor and to thus rest on it when the cradle's legs have been made to adopt an inclined position. 40 45

[0007] The upright shrouding pieces have a corner piece upperly fitted to each of them, the lengths making up the shrouding of the upper frame being fitted between said corner pieces. 50

[0008] These and other features will be best made apparent by the following detailed description whose un-

derstanding will be made easier by the accompanying three sheets of drawings showing a practical embodiment being cited only by way of example not limiting the scope of the present invention.

DESCRIPTION OF THE DRAWINGS

[0009]

Figs. 1 and 2 are each a perspective view in an unfolded and a folded state respectively showing the conventional cradle type being improved as per the invention;

Figs. 3 and 4 in a perspective view and in a side elevation respectively show the cradle having been finished off as per the invention;

Fig. 5 is a perspective view showing the shrouding piece being provided for the cradle's legs;

Fig. 6 is a cross-sectional view as per line VI-VI in Fig. 4 showing the makeup of the shrouding for the cradle's upper frame;

Figs. 7 and 8 illustrate a wheel bearing cap as seen from underneath in a perspective view from the rear and in a side elevation with the wheel in action, respectively; and

Fig. 9 is a perspective view showing this cradle in its folded state.

DETAILED DESCRIPTION

[0010] According to the drawings a conventional travel cradle being shown in Figs. 1 and 2 is the recipient of the improvements being the object of this invention, said cradle essentially consisting of an upper frame being formed by four side members (1), (2), (3) and (4) being articulated at their central region, four legs (5), (6), (7) and (8), a base structure being formed by radial members (not shown) with supports (9) on the floor, and four flexible sides (10), (11), (12) and (13) and a flexible bottom (14) being made of fabric, for example, a foldable plate (not shown) being arranged on said bottom and thereupon having a small mattress (also not shown) arranged on it. 35 40

[0011] The improvements being the object of this invention consist in exteriorly fitting to each of the four legs (5), (6), (7) and (8) a shrouding being formed by a respective upright, rigid piece (15) having an angular cross-section forming a 90° angle and being radiused at the corner, each of said pieces upperly having a recessed steplike portion (16) being apt to have a corner piece (17) having an also angular shape and a vertical section having the shape of an inverted channel snugly fitted and secured to it (see Fig. 9). 45 50

[0012] The lengths (18) forming the shrouding on the four side members (1), (2), (3) and (4) of the cradle's upper frame are fitted between the four corner pieces (17) being fitted to the upright pieces (15), said lengths being made of a semiflexible material, having a gener-

ally prismatic cross-section (Fig. 6) and having a longitudinally split (19) lower half in order to be apt to more easily be fitted to the upper frame side members.

[0013] Each of the pieces (15) is inferiorly provided with another recessed steplike portion (16') being apt to have a respective cap (20) securely fitted to it, two (20') of said caps being each fitted with a wheel (21). These caps (20') form a by way of fork (22) (Fig. 7) to which the wheel is securely fitted at a higher level than that of the base (23) of the cap so as to normally prevent the wheel from being in contact with the floor (S) (Fig. 4).

[0014] In order to allow the cradle to be more easily moved when having been arranged in its unfolded arrangement in order to be used this base (23) is nevertheless characteristically formed with an arcuately bevelled portion (24) being apt to allow the wheel (21) to come into contact with the floor (S) and to thus rest on it when the cradle's leg has been made to adopt an inclined position (as shown in Fig. 8).

[0015] The upright pieces (15) will be preferably made of blow-moulded plastics material, and the lengths (18) will be made of polyurethane foam.

[0016] By changing the format of this cradle thereby adopting for its plan-view a square shape instead of the rectangular one an infant playpen will be obtained which will have the same folding features, an identical finished off appearance and the same advantages as those of the cradle.

4. A foldable cradle as per claim 1, **characterised in that** the upright shrouding pieces have a corner piece upperly fitted to each of them, the lengths making up the shrouding of the upper frame being fitted between said corner pieces.

Claims

1. A foldable cradle comprising an articulated metal framework being formed by an upper frame, four legs and a base structure; **characterised in that** a shrouding is fitted to each of the four legs of the cradle, said shrouding being for each of said legs formed by a respective upright, rigid piece having an angular cross-section, a shrouding being upperly fitted between said upright, rigid pieces and being thereby applied on the four upper frame side members, this latter shrouding being for each of said side members made up by a respective semiflexible length having a generally prismatic cross-section.
2. A foldable cradle as per claim 1, **characterised in that** a cap is inferiorly and securely fitted to each of the upright shrouding pieces, at least two of said caps having a respective wheel fitted to each of them.
3. A foldable cradle as per claim 2, **characterised in that** in its assembled state said wheel does not project from the cap base, this latter having an arcuately bevelled portion allowing the wheel to come into contact with the floor and to thus rest on it when the cradle's legs have been made to adopt an inclined position.

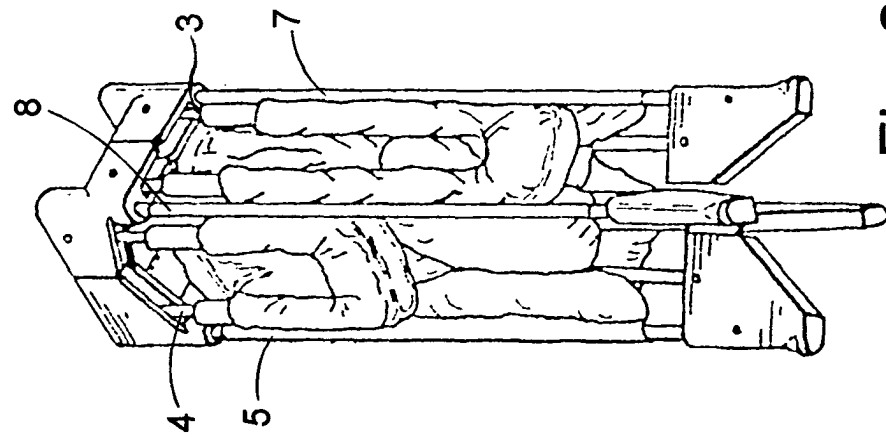


Fig. 2

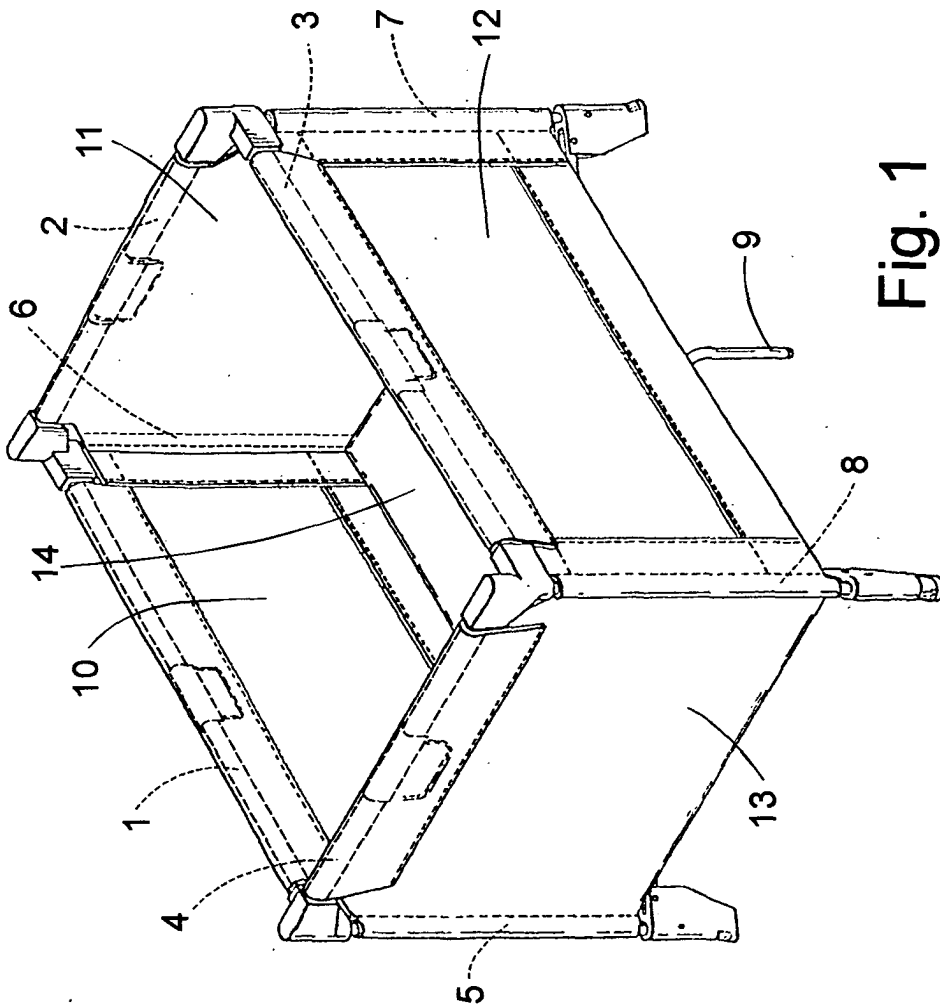
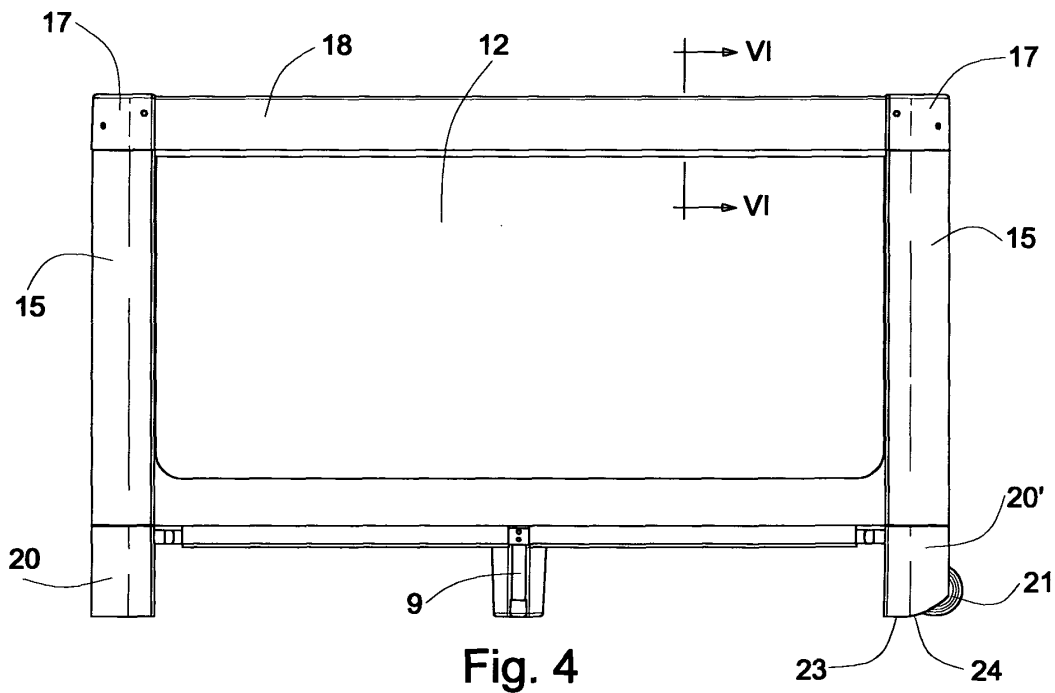
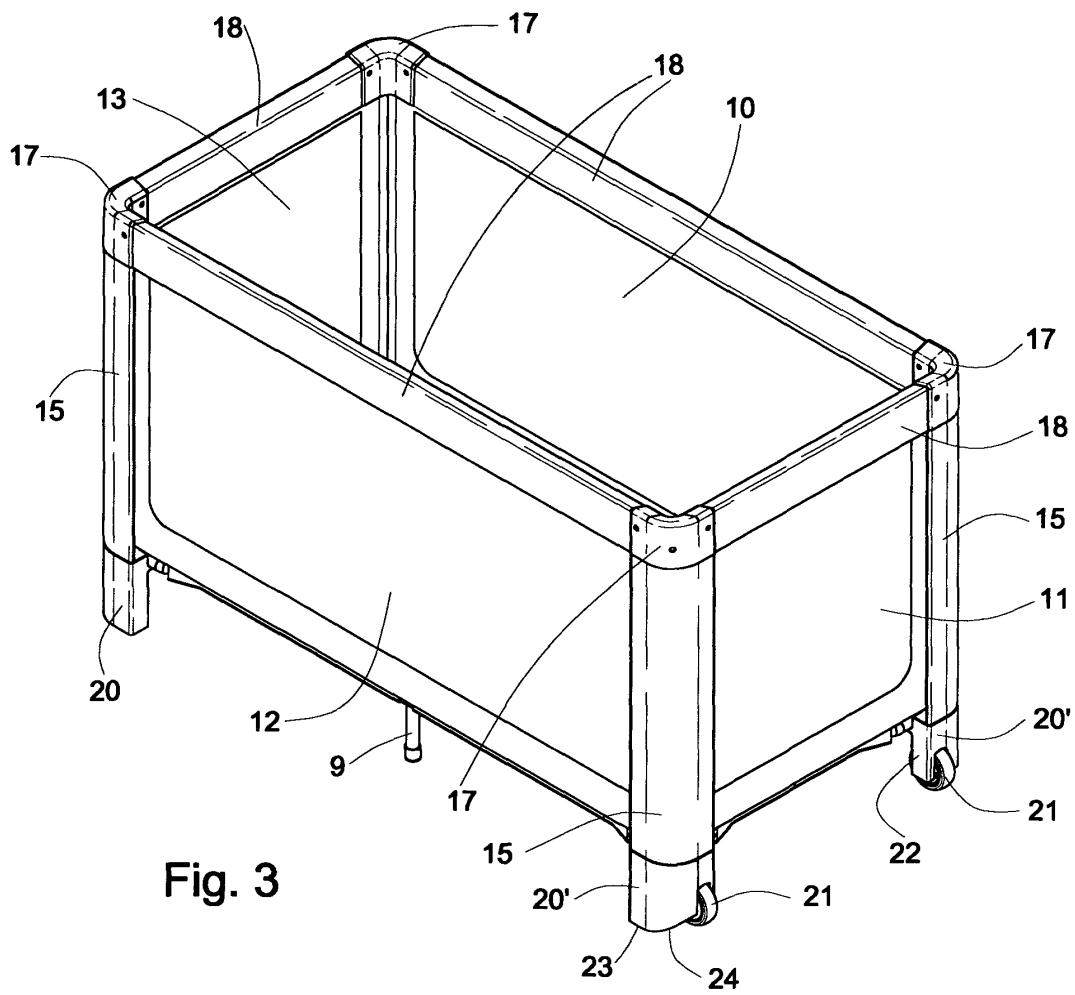


Fig. 1



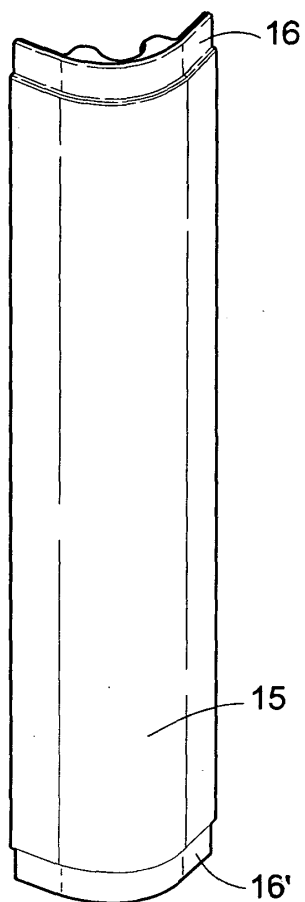


Fig. 5

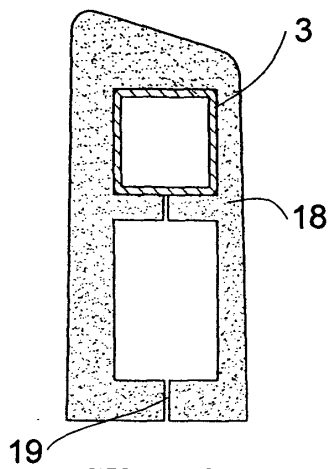


Fig. 6

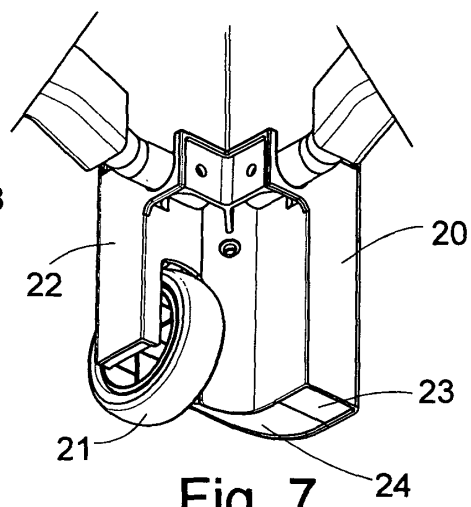


Fig. 7

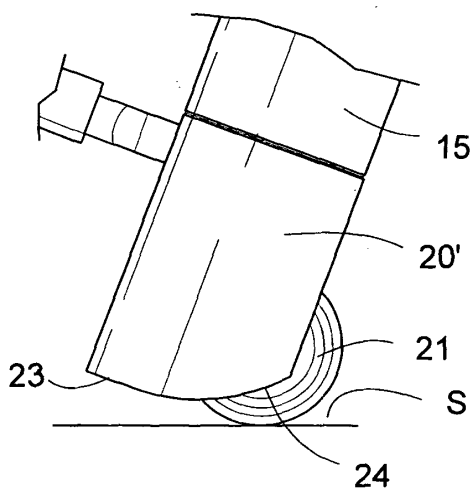


Fig. 8

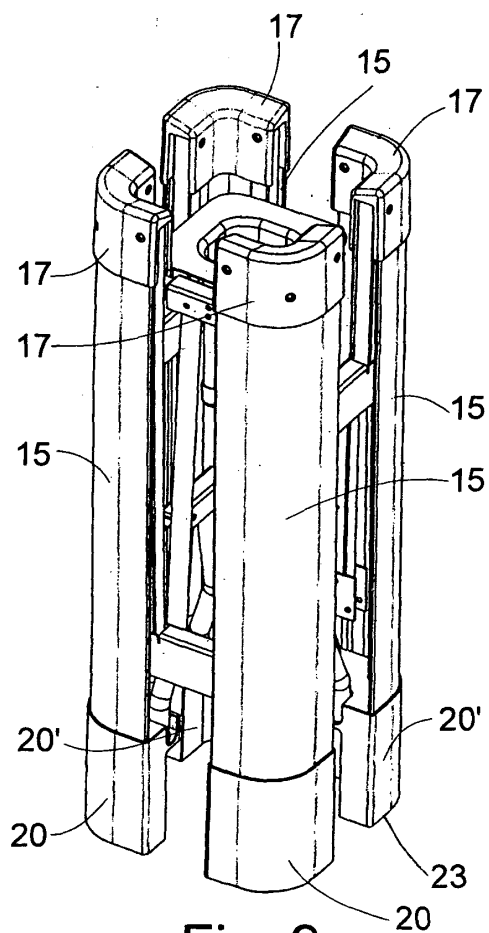


Fig. 9



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 04 38 0282

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	EP 1 186 263 A (KUO) 13 March 2002 (2002-03-13) * abstract; figures * -----	1	A47D9/00
A	US 5 752 283 A (ARENS) 19 May 1998 (1998-05-19) * abstract; figures * -----	1	
A	DE 40 10 509 A (MARIOL) 21 March 1991 (1991-03-21) * abstract; figures * -----	1	
A	DE 195 44 615 A (CHEN-HUANG) 5 June 1997 (1997-06-05) * abstract; figures * -----	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			A47D
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		22 June 2005	VandeVondele, J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 04 38 0282

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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22-06-2005

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